

with the top to the left for projection on opaque screens, and to the right for projection through translucent screens.

RAISING THE PICTURE

Raising the picture on the screen is done by pulling backward on the lever (11) in the right side of the base.

CHANGING LAMPS

Remove inner lamp house by lifting off the lamp house cover (15). Lift metal cap from lamp. Remove lamp by pressing down gently and turning counter-clockwise until it comes to a stop, then withdraw lamp. Put new lamp into position by locating lugs in slots, then press down gently and turn clockwise until lamp is held firmly. Replace metal cap on lamp, and replace inner lamp house and cover. An extra lamp should always be kept in reserve so as to avoid delay when the one in use has burned out or by chance broken.

KEEP GLASS CLEAN

Clear linen rags are most satisfactory for wiping the glass. The front and rear surfaces of the projection lens are easily wiped by removing the lens mount from the Projector. Do not try to remove the lens from the nickel-plated mount in which it is sealed. With the film gate open, the aperture glasses (5 and 6) can be cleaned on their faces only. If necessary to wipe the reverse surfaces, the front aperture glass in its holder is released by springing the little catches at (14) and opposite; while the rear aperture glass is removed by grasping its sides with thumb and forefinger, pushing toward the top, and lifting the lower edge free from its trough.

While the inner lamp house (15) is out, as for changing lamps, both the meniscus lens and the reflector can be wiped without removal from their sockets. The two bi-convex condenser lenses are reached for cleaning by sliding them out of the middle section of the Projector. To do this, with a key or coin pry off the curved housing plate at (12) and the similar one at the bottom of the middle section, then with a finger push out the lenses from below upward.

It is important that all glassware be replaced in its original position, so as to preserve the original lighting efficiency of the Projector.

USE OF THE SLIDE CARRIER

For 2" x 2" glass plate mounts holding individual frames requires that both the front aperture glass holder complete, and the rear aperture glass, be removed; so that the carrier operates in the space formerly occupied by them.

INTERNATIONAL RESEARCH CORPORATION

ANN ARBOR, MICHIGAN

INSTRUCTIONS FOR OPERATING

ARGUS

Model A

PROJECTOR

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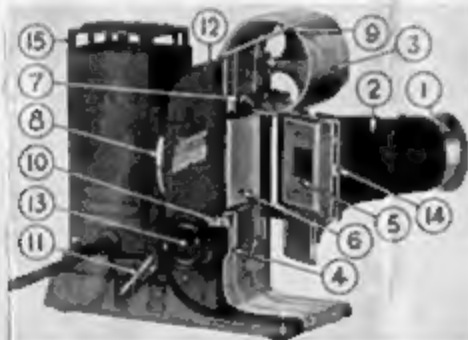
Instructions for Operating the *Argus* Projector

GENERAL

Always keep the Projector clean and dry, and in its case when not in use. Always have the projection lamp turned off when threading film into the Projector.

Films are to be rolled with the dull side out for projection on regular screen; but with the shiny side out for projection through translucent screen, the first picture always on the outside of the roll.

The current used is ordinarily 110-120 volt. By changing to the appropriate lamp, the Projector can be used directly on 6-volt.



12-volt, or 32-volt connections. It can be used on 220 volt current with the aid of a resistor inserted between the main socket and the Projector. Lamps, resistors, and special battery connection cords can be secured from us.

THREADING THE PROJECTOR

Open the film-gate by releasing the catch-spring (10) and swinging the lens barrel (2) to the left. Hold the film by its edges, with about four inches hanging free. Raise the retaining bar (9), insert the free end of the film in slot (7), and the film over the axis bar of the magazine (3), and lower the retaining bar. Place sprocket holes of the free end of the film over sprocket teeth (4), and hold in position while closing the film-gate completely so that catch-spring holds firmly.

FOCUSING

Plug the connecting cord into the source of current, and turn on the push-through switch in the connecting cord. Pull the nickel-plated lens mount (1) out about two inches, turn the operating button (13) clockwise until some sort of image appears on the screen; then move the lens mount (1) forward or backward with a twisting motion until the image is sharp on the screen.

FRAMING

When it is necessary to adjust the film so that a full frame or picture appears on the screen, the operating button (13) is merely pushed inward and turned clockwise until the desired framing is secured. Then the operating button is released, and it springs back into its operating position.



At each quarter-turn of the operating button the intermittent (picture-changing mechanism) advances one frame of the single-frame film, showing a new picture on the screen; and at each half-turn it does

the same thing for the double-frame film. To reverse or repeat any picture, the operating button is turned counter-clockwise. When reversing for more than four frames, relieve the film from binding in the magazine by grasping the inside of the roll and turning it inside the magazine so as to make the roll smaller.

To change the stopping point of the operating button, swivel the projector-head so that the bottom of the condenser compartment is toward you, and you see a narrow nickel-plated control slide fitted with a peg; shove on this peg to place the slide in the position indicated by the legend. The distance the slide will move is about $\frac{1}{8}$ inch.

MASKING

The holder of the front aperture glass (5) forms the mask used with double-frame pictures. To insert the smaller mask used with single-frame pictures, release this holder by springing catches at (14) and opposite, fit the single-frame mask snugly in place against the free face of the double-frame mask, and snap the front aperture glass holder back into place against the base of the lens barrel.

SWIVELING

The swivel (8) holds the projector-head firm. For single-frame pictures the head is kept upright, as it is for vertical double-frame pictures. For horizontal double-frame pictures the head is swiveled